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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,172	12/21/2001	Satoru Miyamoto	60093-B CCD	6113

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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 08/29/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-6

Office Action Summary

Application No.

10/032,172

Applicant(s)

MIYAMOTO ET AL

Examiner

Christopher D RoDee

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 26-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 26-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

The non-elected claims have been canceled in response to the restriction set forth in the last Office action.

Claim Rejections - 35 USC §§ 102 & 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 5, 7, 26-28, 30, and 32 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Karaki *et al.* in US Patent 5,912,101.

This rejection was set forth in the last Office action. In response to the rejection applicants provide a detailed traversal and a declaration under Rule 132. The traversal discusses the claim limitations and the meanings of terms such as "fluidity agent", "a residue ...", and "average circularity". Applicants state that the "average circularity has nothing to do with the amount of residue" resulting from the test discussed (response p. 3). This does not appear to be consistent with the specification.

Specification page 17 states that the circularity of the toner particles has a close relationship with the formation of aggregated toner particles. The greater the circularity of the toner particles the more easily aggregates are formed. More aggregates equate to a higher residue value because aggregates are less likely to pass through the sieve (spec. pp. 16-17). The specification clearly indicates that toner particle circularity is result effecting on the residue values for a toner containing toner particles and a fluidity agent.

The Examiner maintains the position that a *prima facie* case of anticipation has been properly made out because the circularity of the reference toner, which controls aggregation as stated in the specification, is within the range disclosed in the specification and claims as giving the requisite residue value. Aggregation directly relates to the residue value as discussed above. Additionally, the reference discloses toner particle sizes that would be expected to pass through the 500 mesh sieve for the reasons given previously (e.g., average toner particle size). The reference also discloses fluidity agent particle sizes that fall within the scope of those preferred by the instant specification for the reasons in the last Office action. The claims specify that the residue is measured for the toner (i.e., toner particles, fluidity agent, and any other non-specified additives). As each component of the reference toner has the pertinent characteristics as discussed here and in the last Office action there is sufficient reason to believe that the claimed residue value is inherently present in reference's examples.

In response to the rejection applicants have submitted an executed declaration under Rule 132 from one of the instant inventors. Declarant states that 100 g of the toners from Examples 1, 2, and 3 was sieved in the manner of the instant invention. Each of the values obtained shows a residue mass outside the scope of the claims. However, it is not clear in the declaration how the toners in the declaration were made or if they were acquired from a vendor or other source. The brief summarization that the toners of Karaki were tested does not establish *by evidence* that the toners were actually Karaki's examples 1-3. In order to show that Karaki's toners were tested the declaration should show that the toners tested had the composition and properties disclosed by the reference (e.g., circularity, circle-equivalent particle diameter, particle size frequency, etc.). The declaration does not meet this requirement.

The declaration must establish that it has produced or obtained the toner (i.e., toner particle and additive(s)) of the reference examples and then test that toner with the sieve

method disclosed. As Declarant has not established that the toner in the evidence is the same as that present in the Karaki examples the rejection is maintained.¹

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota in US Patent 5,240,803 in view of Inaba *et al.* in US Patent 5,827,632, further in view of *Handbook of Imaging Materials* to Diamond, p. 168-9, 178-81.

Applicants traverse this rejection because the method of determining circularity in the instant application is different from that in Ota and that the combination of references does not suggest the claimed residue value. Further, applicants rely on the evidence in the recently filed Rule 132 declaration.

In the traversal applicants state that circularity is determined by the same method as a specific Japanese patent document reference on specification page 4 (see footnote on response p. 4). The specification does not state that this reference's method is employed nor is the foreign document incorporated by reference. It is discussed as prior art but not as limiting the determination of circularity in the instant specification. The specification states that a specific commercially available device is used to determine circularity (specification p. 18). The specification does not state that this device determines circularity in the manner asserted in the response nor is it apparent that the circularity values obtained by this device would be substantially different from those using the method of Ota. The determination of circularity is also not defined in the instant claims. As both the specification and Ota are determining circularity of the toner particles and as both denote a spherical particle as having a value of 1, it appears that the circularities of the reference and claimed toners will be substantially the same for the same numerical values. Applicants have not shown otherwise.

¹ Note an apparent typographical error in Karaki's Example 1. It appears that the average particle diameter should be 6.1 μm rather than 61 μm given the particle size distribution in the corresponding Figures.

The evidence for Ota is not persuasive for the same reasons as given above for Karaki. In summary, the evidence for Ota does not show that the toners tested were those of Ota as specific preparation step are not present. The declaration does not show that the toners attributed to Ota had the properties disclosed by the reference (i.e., that the toners of Ota were actually tested in the Rule 132 declaration).

The Rule 132 declaration also does not show an unexpected result for the inventive toner versus that of Ota as no comparative tests have been made for those properties discussed in the instant specification as obtained by the inventive toner (e.g., see Evaluation factors shown in Table 1). Any such a showing must establish that the results are unexpected, statistically significant, and of practical advantage. The data in the Table summarizes the results obtained rather than providing the actual values (e.g., maximum number of printable copies, number of lines within 1 mm, etc.). Such summarization masks the actual values produced and raises concerns of statistical significance. For example, factor (6) in the specification has sample with designations of "4" and "3". These values could correspond to 3499 and 3500 printable copies or 3000 and 20,000. The first pair of values would not appear to be significantly different but the second pair of values would be significantly different. The declaration in combination with the specification evidence does not show an unexpected result for these reasons.

Applicants also state that the disclosures of Diamond and Inaba in combination with Ota do not make obvious the claimed residue values as none of the references suggest such a value. The Examiner again relies on the statement of Diamond that it is advantageous to obtain as narrow a toner particle size distribution as possible to reduce dirt in the machine environment (p. 178, § 4.3.3). Such a statement would clearly lead the artisan to conclude that aggregates of the toners are not desired because aggregates would have an average particle size substantially larger than that of the individual particles. Diamond's teaching would be

without merit if it did not limit the size of aggregate particles in the toner as there would be little use in limiting the size of the individual particle while permitting aggregates that have substantially larger sizes than desired.

The claims present a specific method of measuring the size of the toner particle sizes via the residue value, both as individual particles and aggregates. Although the references do not teach the same test as claimed they clearly teach the same property: limiting toner particle sizes. Although the test is not taught, the property of the test (particle size) is taught. As the same property is taught, the same toner having that property is taught. Clearly the artisan would see the size of the toner particles and their aggregates as result effecting and would optimize the particle size to as small a value as possible. Optimizing the toner particle size would implicitly exclude aggregates of these particles as aggregates would only multiply the number of particles at the larger particle sizes.

The rejection is maintained.

Claims 1-8 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karaki *et al.* in US Patent 5,912,101 in view of Inaba *et al.* in US Patent 5,827,632, further in view of *Handbook of Imaging Materials* to Diamond, p. 168-9, 178-81.

This rejection is traversed in the response (pp. 5-6) for the same reasons as given above for Karaki alone and for the combination rejection. The declaration evidence for Karaki is not effective for the reasons given in the § 102 rejection above and does not show an unexpected result for the same reasons as given above for the rejection including Ota. The combination with Inaba and Diamond is seen as effectively preventing allowability of the claims for the same reasons as given above. Specifically, it is not apparent that applicants have tested the toner of Karaki and there is no showing of unexpected results.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D RoDee whose telephone number is 703 308-2465. The examiner can normally be reached on most weekdays from 6 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 703 308-2464. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0661.

cdr
August 28, 2002


CHRISTOPHER RODEE
PRIMARY EXAMINER